

## **MAT Lab – Integrating Assistive Technology into Pre-Service Teacher Education**

**The following is an example of the lesson plan developed for incorporating the Assistive Technology Project into Technology in the Classroom, a core pre-service teacher education class in the College of Education at the University of Iowa. This plan, its implementation, successes, difficulties, obstacles, feedback, student work, and future direction of the program will be discussed during the session.**

### Assistive Technology Project

#### I. Unit objectives

Students will:

1. Learn about Assistive Technology.
2. Present-demonstrate technologies to a class.
3. Use simple editing techniques with Windows Moviemaker.
4. Reflect on their teaching.
5. Upload appropriate artifacts to their ePortfolio.

#### II. Procedures

1. Students will be assigned to five groups with two to three students in each group. Each group will be appointed one of the following assistive technologies.
  - a) Speech Recognition Software
  - b) Scan and Read Programs
  - c) Universal Design for Learning/Symbol-Based Learning Technology
  - d) Screen Enlargers + Screen Readers
  - e) Alternative Mouse Options
2. Groups will check out Assistive Technology laptops from the ETC counter or use computers in the AT lab in N170LC to investigate and learn basic operations of the assigned technology through:
  - a) Scheduled consultations (required) with ICATER staff prior to laptop checkout. Email Jim Stachowiak ([james-stachowiak@uiowa.edu](mailto:james-stachowiak@uiowa.edu)), Coordinator of ICATER to set up a time for your group. Please provide a suggested meeting day and time.
  - b) Documentation, written instructions and help screens.
  - c) On-line sources of information, web searches.
  - d) Self exploration. Each group can elect to check out a laptop with specifically installed Assistive Technologies.
3. Groups will present their assigned assistive technology to the class (**5 - 8 minutes**). The targeted audience is K-12 pre-service or in-service teachers. The presentation will be recorded by a digital video camera and microphone setup by the Teaching Assistant.
4. The recorded session will be edited
  - Titles
  - Credits
  - Cutting, pasting footage
  - Transition(s)

Video production skills will be taught in class, some out-of-class time may be needed to edit videos.

5. Presentation requirements

Presentations will demonstrate basic features of the assistive technology and address the following questions and issues.

- a) The content is interesting and clear.
- b) Hands-on demonstration of the technology covering:
  - What is it, what does it do?
  - How much does it cost?
  - What other equipment is needed (minimum/suggested computer specifications, extra devices, head phones, microphones, special keyboards etc..)?
- c) What types of disabilities or personal preferences can it address?
- d) Brief evaluation of the technology
  - Was it easy to learn?
  - Did it operate as expected, were there crashes and delays?
  - Does it seem useful and valuable?

6. Videos will meet the following requirements

- a) Videos will be uploaded to each group member's ePortfolio with links to the course page under the name *Assistive Technology Demonstration* for this course and to standards *B. Diverse Learners* and *J. Technology* standards with the name *Assistive Technology Demonstration*.
- b) Each student will have an active role in the demonstration, names will be presented in ending credits.

7. The reflective paragraph will meet the following requirements

- a) Each student will write a short reflective essay (two paragraphs maximum) on their perceptions of their teaching, what went well and suggested improvements.
- b) The paragraph will be sent to the Teaching Assistant for review and approval and later posted on the student's ePortfolio site named *Video Reflection* (07E/S:102 Technology in the Classroom) under Standard H *Reflection and Professional Development*.
- c) Questions to help guide student self-reflections include:
  - What do you notice about your demeanor - facial expression, eye contact, voice, body language, in communicating with students?
  - Where there any technical difficulties? If so how did you overcome them? How could they have been prevented? Did you make any special or extra preparations to accommodate for technical difficulties?
  - Describe your observations about the introduction of the lesson, were you able to attract student attention and interest?
  - What were your goals for this lesson? Did you achieve them? Why or why not?
  - What do you think about your students' involvement in this lesson? Did they seem interested and attentive?
  - Are you satisfied with the overall pace and closure of your presentation?
  - What did you particularly like about the lesson? What would you change?